

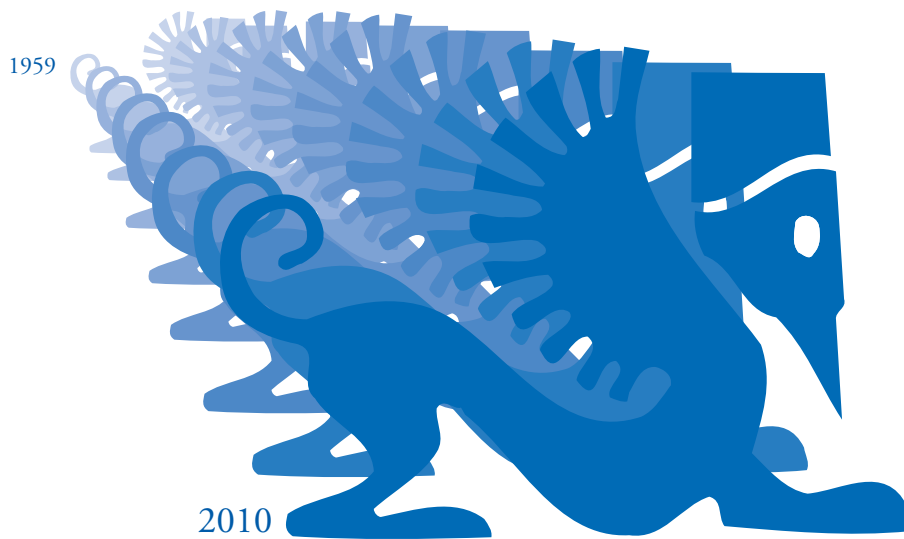
The LubriTec logo is rendered in a stylized, metallic gold font with a slight 3D effect. The letter 'i' in 'Lubri' has a small flame-like shape above it. The background of the entire cover is a dark blue gradient with a central image of a water droplet hitting a surface, creating concentric ripples.

**LubriTec**

# **Synthetic Lubricant Cross Reference Charts**

Fifth Edition

A supplement to  
**OEM/Lube News**



***Over Fifty Years Experience in Producing Fine Synlubes  
Makes NYCO Your Best Choice***

NYCO offers a broad range of high performance synthetic lubricants to meet the most demanding application requirements. Our 50 plus years of experience are backed by innovative R & D and the most rigid manufacturing standards and technical know-how. Our dedicated sales and technical service staff provides added assurance in the proper selection and use of all NYCO products.

Whatever your application - from gas turbines to compressors, hydraulic systems to dielectric fluids, greases to synthetic esters - there is a TUBRONYCOIL<sup>®</sup>, NYCOLUBE<sup>®</sup>, HYDRAUNYCOIL<sup>®</sup>, NYCODIEL<sup>®</sup>, NYCOGREASE<sup>®</sup> or NYCOBASE<sup>®</sup> product to match your requirements.

NYCO AMERICA is ready and eager to serve you. Make us the Number One choice to meet your toughest lube requirements. We're confident you'll be glad you did.

Visit our website for complete product information.



Superior in Performance and Value

Toll Free: 1-877-USA-NYCO  
Website: [www.nycoamerica.com](http://www.nycoamerica.com)



# **Synthetic Lubricant Cross Reference Chart Series Reference Guide**

**5<sup>th</sup> Edition**

**Lubrication Technologies, Inc.**  
Houston, TX 77082

[www.lubritecinc.com](http://www.lubritecinc.com)

**OEM/Lube News**

## **Introduction**

Welcome to the 5<sup>th</sup> edition of the Synthetic Lubricant Cross Reference Chart Series Reference Guide. We have developed this guide to assist lubricant marketers to be able to ascertain the equivalence of various synthetic lubricants on the worldwide market and to provide as much data on each of these products as feasibly possible within the context of this research study. All the information and data listed in this guide are based upon research, experience and data submission from participating lubricant companies. While we believe that, to the best of our knowledge, all this information is accurate and reliable, there are no implied guarantees or warranties, and such material should be used only as a guide to the users of this reference guide.

# One small addition enhances the big picture

RohMax additive technology improves performance and efficiency



RohMax additive solutions provide higher levels of savings, performance and efficiency, growing new opportunities for your products and your customers' performance. With local experts, Manufacturing Facilities and Technology Centers strategically located throughout the world, we help our customers achieve greater results no matter what the economic climate. For information on our VISCOPLEX® product portfolio and our worldwide locations, please visit [www.rohmax.com](http://www.rohmax.com).

Evonik. Power to create.



**Synthetic Lubricant Cross Reference Chart Series Reference Book  
Fifth Edition**

**Table of Contents**

|  | Page |
|--|------|
| Title Page.....  | 1    |
| Table of Contents.....   | 5    |
| PAO Compressor Lubricants Cross Reference Chart .....                  | 7    |
| Diester Compressor Lubricants Cross Reference Chart .....              | 11   |
| PAG & POE Compressor Lubricants Cross Reference Chart .....            | 14   |
| Refrigeration Compressor Lubricants Cross Reference Chart .....        | 19   |
| H-1 Food Grade Compressor Lubricants Cross Reference Chart .....       | 23   |
| H-1 Food Grade Gear/ Hydraulic/ Chain Oils Cross Reference Chart ..... | 26   |
| Industrial EP Gear Lubricants Cross Reference Chart .....              | 31   |
| R&O/Non-EP Gear Lubricants Cross Reference Chart .....                 | 36   |
| Industrial Chain Lubricants Cross Reference Chart .....                | 39   |
| AW Hydraulic Fluids Cross Reference Chart .....                        | 43   |
| Fire Resistant Hydraulic Fluids Cross Reference Chart .....            | 46   |
| Synthetic Heat Transfer Fluids Chart .....                             | 51   |
| Misc. Industrial Lubricants Chart .....                                | 54   |
| Passenger Car Motor Oils Cross Reference Chart .....                   | 58   |
| Heavy-Duty Diesel Engine Oils Cross Reference Chart .....              | 69   |
| API GL-5 Gear Lubricants Cross Reference Chart .....                   | 74   |
| SAE 50 Manual Transmission Lubricants Cross Reference Chart .....      | 80   |
| Synthetic Automatic Transmission Fluids Chart .....                    | 83   |
| Synthetic Low Horsepower Engine Oils.....                              | 86   |
| Misc. Automotive Lubricants Chart .....                                | 91   |
| Greases Cross Reference Chart .....                                    | 93   |
| Synthetic Lubricant Basestocks Chart .....                             | 104  |
| Misc. Other .....  | 114  |

**A Supplement to:**



## Notes, Disclaimer and Copyright

1. The intention of this study was to list finished synthetic lubricants/coolants made from Group III, Group IV and/or Group V synthetic base oils.
2. All the listed lubricants are full synthetic; none are para-synthetic or semi-synthetic.
3. The API, ACEA and other industry classifications and OEM specifications shown for the engine oils were those listed in the respective companies' literature at the time this information was taken from such, may possibly be upgraded or changed at the time of viewing, are in some instances generalized due to differences for various SAE viscosity grades, and should be used for supplemental information only.
4. The API classifications and OEM specs shown in the API GL-5 Gear Lubricant chart were those listed in the respective companies' literature at the time this information was taken from such, may possibly be upgraded or changed at the time of viewing, are in some instances generalized due to differences for various SAE viscosity grades, and should be used for supplemental information only. All such oils (except for a few lesser known suppliers where data is not provided) are typically API GL-5, minimum API GL-4, except where noted.
5. The API classifications and OEM specs shown for the SAE 50 Manual Transmission Fluids were those listed in the respective companies' literature at the time this information was taken from such, may possibly be upgraded or changed at the time of viewing, and should be used for supplemental information only. Most of these oils (except for a few lesser known suppliers where data is not provided) are typically API CD and API GL-1 except where noted.
6. Many of the listed gear and transmission lubricants meet/exceed the Extended Warranty requirements for Eaton Roadranger (where noted) and Meritor (Rockwell) extended drain.
7. The majority of the compressor lubricants contained within the PAG and POE Compressor Lubricants chart are used in applications compressing process gas, natural gas, hydrogen and other polar gases.
8. A few of the listed lubricants in the charts may no longer be marketed, but were intentionally shown so that the user of these charts could determine a suitable replacement for a recently obsolete lubricant.
9. The contents of any of these charts does not imply that these are the only synthetic lubricants and basestocks available for blending synthetic lubricants. Upon requesting the latter from most basestock companies, these are the ones that submitted their data to us.
10. These charts are only intended as lists of similar synthetic lubricants. Lubrication Technologies, Inc. does not intend to represent that all the lubricants listed herein are necessarily of the same quality or offer the same level of performance in all instances. Quality and performance can vary.
11. Disclaimer: every reasonable effort was taken to insure that these charts are as accurate as possible; however, we will not be responsible any liability for any errors or inaccuracies. Lubrication Technologies, Inc. will not be held responsible for any decisions made as a result of the information provided above. These charts should be used only as a guide. Products should be verified with supplier.
12. Lubrication Technologies, Inc. is the owner of copyright, database rights and all intellectual property rights of these charts; they shall not be copied (except for one personal use copy), modified, distributed, re-transmitted in total or any part thereof, without the prior written consent of Lubrication Technologies, Inc.

# Lubrication Technologies, Inc.

## Synthetic Lubricant Cross Reference Chart Series

### PAO Synthetic Compressor Lubricants

|                                     | ISO 32                    | ISO 46              | ISO 68              | ISO 100             | ISO 150           | ISO 220             | Remarks                       |
|-------------------------------------|---------------------------|---------------------|---------------------|---------------------|-------------------|---------------------|-------------------------------|
| <b>Acculube</b>                     | ALS 32                    | ALS 46              | ALS 68              | ALS 100             | ALS 150           |                     |                               |
| <b>Afton Chemical</b>               | HiTEC 5032                | HiTEC 5046          | HiTEC 5068          | HiTEC 5100          |                   |                     |                               |
| <b>Agean Marine (Greece)</b>        |                           | Alfasynt PAO 46     | Alfasynt PAO 68     |                     |                   |                     |                               |
| <b>Agip (Italy)</b>                 | Dicrea SX 32              | Dicrea SX 46        | Dicrea SX 68        | Dicrea SX 100       |                   | Dicrea SX 220       |                               |
| <b>Allegheny Petroleum</b>          | Altra PAO 32              | Altra PAO 46        | Altra PAO 68        | Altra PAO 100       | Altra PAO 150     | Altra PAO 220       |                               |
| <b>Aluchem (Italy)</b>              | Alusynt C 32              | Alusynt C 46        | Alusynt C 68        | Alusynt C 100       | Alusynt C 150     |                     |                               |
| <b>American Agip</b>                | 30321 SCO                 | 30461 SCO           | 30681 SCO           |                     |                   |                     | (Synthetic Compressor Oil)    |
| <b>American Lubricants</b>          | Syn Comp P32              | Syn Comp P46        | Syn Comp P68        | Syn Comp P100       | Syn Comp P150     | Syn Comp P220       |                               |
| <b>American Synthol (Amerilube)</b> | A327C                     | A467C               | A687C               |                     |                   |                     |                               |
| <b>AMSOIL</b>                       | PCH                       | PCI                 | PCJ                 | PCK                 | PCL               |                     |                               |
| <b>Anderol</b>                      | 3032                      | 3046 3057M          | 3068                | 3100                | 3150              |                     | 3057M is ISO 46/68            |
|                                     | 3432                      | 3446                | 3468                | 3486                |                   |                     |                               |
|                                     | See Royal Lubricants also |                     |                     |                     |                   |                     |                               |
| <b>Aral (Germany)</b>               |                           | Motanol SPA 46      | Motanol SPA 68      | Motanol SPA 100     |                   |                     |                               |
| <b>Atlas Copco</b>                  |                           | GA-8K               |                     |                     |                   |                     |                               |
| <b>Behr Hella</b>                   |                           |                     | PAO 68 Plus UV      |                     |                   |                     |                               |
| <b>Benz</b>                         | Syncon 32                 | Syncon 46           | Syncon 68           | Syncon 100          |                   |                     |                               |
| <b>BP</b>                           | Enersyn RC-S 32           | Enersyn RC-S 46     | Enersyn RC-S 68     |                     |                   |                     | Not Marketed in W. Hemisphere |
| <b>Busch</b>                        |                           | R580                |                     | R570                |                   |                     |                               |
| <b>BVA</b>                          | SHP-1-32                  | SHP-1-46            | SHP-1-68            | SHP-1-100           | SHP-1-150         | 4601-220            |                               |
| <b>C&amp;C Oil Co.</b>              | Duration S.C. F. 32       | Duration S.C. F. 46 | Duration S.C. F. 68 |                     |                   |                     | (Synthetic Compressor Fluid)  |
| <b>Cam2</b>                         | Synthetic C.O. 32         | Synthetic C.O. 46   | Synthetic C.O. 68   | Synthetic C.O. 100  |                   |                     | (Synthetic Compressor Oil)    |
| <b>Camco</b>                        | 41-32                     | 41-46               | 41-68               | 41-100              | 41-150            |                     |                               |
| <b>Castrol</b>                      | SHL 32                    | SHL 46              | SHL 68              | SHL 100             | SHL 150(+)        | SHL 220(+)          | + grades deleted in 2006      |
|                                     |                           | Aircol SR46         |                     |                     |                   |                     |                               |
| <b>Cepsa (Spain)</b>                |                           | Compressor ARS 46   | Compressor ARS 68   | Compressor ARS 100  |                   |                     |                               |
| <b>Champion (G-D)</b>               | Rotorlub 8000             | PAO 46              |                     |                     |                   |                     |                               |
| <b>Chemtool</b>                     | CT Compressor 32          | CT Compressor 46    | CT Compressor 68    | CT Compressor 100   | CT Compressor 150 |                     |                               |
| <b>Chevron</b>                      | Tegra SCO 32              | Tegra SCO 46        | Tegra SCO 68        | Tegra SCO 100       | Tegra SCO 150     | Tegra SCO HC 220    | (Synthetic Compressor Oil)    |
| <b>CITGO</b>                        | ComprGard PAO 32          | ComprGard PAO 46    | ComprGard PAO 68    | ComprGard PAO 100   | ComprGard PAO 150 |                     | (CompressorGard)              |
|                                     |                           | ComprGard XL 46     | ComprGard XL 68     |                     |                   |                     | High Performance              |
|                                     |                           |                     |                     | ComprGard PAO H-100 |                   | ComprGard PAO H-220 | for hydrogen & natural gas    |
| <b>CLC Lubricants</b>               | PAC 32                    | PAC 46              | PAC 68              | PAC 100             | PAC 150           |                     |                               |